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Application of SHAH, Ankur et al.

Serial No.: 10/778,682

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Reply to Office Action of January 9, 2008

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AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

- 1. (Currently Amended): A system for measuring quality of a digital network, comprising:
 - a controller;
 - a test dialer:
- a network component remote from said test dialer and said controller, said network component being in communication with said controller and said test dialer over the digital network; and
- a testing function resident on said network component, said controller controlling said
 test dialer and said testing function to determine at least one quality selected from the group
 consisting of a voice quality, a call completion quality, a load capability quality, and any
 combinations thereof.

wherein said testing function is configured to receive a received version of a portion of a reference file from said test dialer and to send the received version of the portion of the reference file to said controller, said controller being configured to calculate said at least one quality based at least in part on a comparison of said received version of the portion of the reference file to an original version of the portion of the reference file.

- 2 (Original) The system as in claim 1, wherein said network component is selected from the group consisting of a multimedia terminal adapter, a fiber node, an amplifier, a tap, and any combinations thereof.
- 3. (Original) The system as in claim 1, wherein said network component is a multimedia terminal adapter positioned at a point-of-service.

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4. (Currently Amended) The system as in clai	m 3, wl	herein	said t	esting	g func i	ion is		
configured to determine said at least one quality occu	us with	out ou	tputti	ng an	outou	t signal	at .	
said point-of-service.				U.			·	*** *** * *
5. (Original) The system as in claim 3, wherei	n said n	nultin	nedia t	awasi.	al ada			
embedded adapter or a stand-alone adapter.	Januar I	Hairm		CHIM	.	pter 15-2		
		•				• • • •		•
6 (Original) The acceptance of the second		, -						
6. (Original) The system as in claim 1, wherein	n said to	esting	functi	on is	conti	rured to		
receive a call set up signal from said test dialer.							٠٠.	
							•	
Claims 7 - 10. (Canceled)		1			•	· :		·
11. (Original) The system as in claim 1, where	in said	at leas	t one	qualit	y con	prises a		
voice quality selected from the group consisting of a M	Mean O	pinior	Scor	e (M()S), a	Percept	ual	
Analysis/Measurement System (PAMS), a Perceptual								
Perceptual Evaluation of Speech Quality (PESQ), and								
								•
12. (Currently Amended) A system for measur	 ing qua	lity ö	n a dig	rital n	· etworl	 k.		
comprising:		• .				<i>j</i>		
a controller;								
a multimedia terminal adapter positioned at a p	oint-of	-servi				•		
a testing function resident on said multimedia t		•			-		· · · · ·	
a test dialer,		i adap	coi, ai					****** ** **
said controller, said multimedia terminal adapte				11_	• •			
•					_			
communication over the digital network so that said te	sung n	nucinon	i can i	ecein	e <u>at le</u>	ast one	O<u>E</u>	
more non-invasive test signals from said test dialer,								
wherein said multimedia adapter is configured	,				-			
of a reference file from said test dialer as the at least or	ne non-	invasi	ve tes	t sign	al and	to send	the	
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received version of the portion of the reference file to said controller, said controller being configured to calculate at least one quality based at least in part on a comparison of said received version of the portion of the reference file to an original version of the portion of the reference file.

13. (Currently Amended) The system as in claim 12, wherein said at least one or more non-invasive test signals further comprises at least one signal selected from the group consisting of a call set up signal, an audio signal, a test audio signal, a load test signal, and any combinations thereof.

Claims 14 - 16. (Canceled)

- 17. (Currently Amended) The system as in claim 12, wherein said multimedia terminal adapter has a first channel for receiving said at least one non-invasive test signal.
- 18. (Original) The system as in claim 17, wherein said multimedia terminal adapter has a separate channel for sending and/or receiving a normal signal while said first channel is in use.
- 19. (Currently Amended) The system as in claim 12, wherein said at least one non-invasive test signal is <u>further comprises</u> a call set up signal.

Claims 20-21. (Canceled)

22. (Currently Amended) A method for measuring quality on a digital network, comprising:

sending an audio signal digital signals representing audio from a reference file across the digital network from a test dialer to point-of-service equipment having a testing function resident thereon;

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generating receiving a test packet a received version of the digital signals from the reference file at said point-of-service equipment, said test packet being representative of said audio signal as received at said point-of service equipment;

sending said received version of the digital signals from the reference file from the pointof-service equipment to a location other than said point-of-service equipment; and

calculating, at the location other than said point-of-service equipment, a voice quality based at least in part on a comparison of said test packet received version of the digital signals from the reference file to an original version of the reference file, said voice quality-being calculated at a location other than said point-of service equipment.

Claim 23 (Canceled)

24. (Original) The method as in claim 22 wherein said test audio signal is non-invasive to said point-of-service equipment.

Claims 25-28 (Canceled)

- 29. (New) The system as claimed in claim 1, wherein the received version of the portion of the reference file is sent to said controller when the network component is no longer conducting a telephone call.
- 30. (New) The method as claimed in claim 22, wherein said received version of the audio signal from the reference file is sent from the point-of-service equipment to a location other than said point-of-service equipment when the point-of-service equipment is no longer conducting a telephone call.
- 31. (New) The system as claimed in claim 1, wherein said testing function configured to send the received version of the portion of the reference file to said controller is configured to

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P. 09 DAVIDSON BERQUIST Fax: 7038946430 9 2008 15:18 Application of: SHAH, Ankur et al. Serial No.: 10/778,682 Filed: February 27, 2004 Reply to Office Action of January 9, 2008 send the received version of the portion of the reference file to said controller using a reliable transmission protocol. 32. (New) The system as claimed in claim 31, wherein the reliable transmission protocol comprises a TCP protocol. 33. (New) The system as claimed in claim 12, wherein said multimedia adapter configured to send the received version of the portion of the reference file to said controller is configured to send the received version of the portion of the reference file to said controller-using a reliable transmission protocol. 34. (New) The system as claimed in claim 33, wherein the reliable transmission protocol comprises a TCP protocol. 35. (New) The method as claimed in claim 22, wherein the step of sending said received version of the digital signals from the reference file from the point-of-service equipment to a location other than said point-of-service equipment comprises sending said received version of the digital signals from the reference file from the point-of-service equipment to a location other than said point-of-service equipment using a reliable transmission protocol. 36. (New) The method as claimed in claim 35, wherein the reliable transmission protocol comprises a TCP protocol.